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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/988,153	11/19/2001	Tadayuki Tsuda	684.3307	8162
5514	7590	10/07/2003	EXAMINER	
FITZPATRICK CELLA HARPER & SCINTO			BRAUN, FRED L.	
30 ROCKEFELLER PLAZA			ART UNIT	PAPER NUMBER
NEW YORK, NY 10112			2852	

DATE MAILED: 10/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/988,153

Applicant(s)

TSUDA ET AL.

Examiner

Fred L. Braun

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 November 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on _____ is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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1. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

2. Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. It is submitted that applicants have not described in their specification how the rotational directions of the photosensitive member driving force receiving portion and the discharging member driving force receiving portion, respectively, produce a rotation moment that causes the cartridge positioning portion to contact a lower surface of the main assembly positioning portion of the apparatus, as recited on lines 41-51 of base claim 1; lines 72-82 of base claim 9; lines 47-57 of base claim 13; and lines 89-99 of base claim 14, respectively, in such a way as to enable one skilled in the art to which it pertains to make and/or use the invention, as required by the statutes, thereby rendering said base claims and any claims dependent thereon as being directed to an insufficient disclosure. More specifically, it appears from the description set forth on page 75, line 2 through page 78, line 3 of applicants specification that the cartridge positioning portions 22a₁, and 22b₁, (Fig. 35), respectively, are caused to engage or contact the main assembly positioning portions 75 (Fig. 35) by lowering the lever 72 (Fig 35) to its lowest point and that the rotational directions of the photosensitive driving force receiving portion and the discharging member driving force receiving portion, respectively, have no influence on

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whether or not positioning portions 22a₁, 22b₁, engage or contact main assembly positioning portion 75.

3. The use of the expression “developer discharging member”, recited on line 12 of base claim 1, line 12 of base claim 9, line 17 of base claim 13, and line 17 of base claim 14, respectively, for example, is objected to under 37 CFR 1.75(d) (1) because said expression does not appear to have clear antecedent basis and/or support in the specification. Correction is required.

4. Claims 4 and 9-14 are further rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claims 4 and 11, respectively, are considered to fail to particularly point out and distinctly claim the invention because the expression “is substantially”, recited on line 3 of claims 4 and 11, respectively, is repeated. Base claims 13 and 14, respectively, are considered to be indefinite because applicants fail to particularly point out and distinctly claim which “receiving portion” the driving force is being transmitted to by the driving force transmission on lines 59-62 of base claim 13 and on lines 100-103 of base claim 14, respectively, the photosensitive drum or the toner stirrers 114, 113, 123 or the developer discharging members. Claim 14 is further indefinite because there appears to be no clear antecedent basis for “said discharging members driving force receiving portion”, recited on lines 30 and 31 and lines 39 and 40, respectively, of claim 14 and because the expression “a third developer discharging

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member.....force receiving portion side”, recited on lines 21-33 of claim 14 is a double recitation of the same expression appearing on lines 43-55 of claim 14. Also, the expression “receiving portion” should be inserted after “force” on line 82 of claim 14 and on line 65 of claim 13, respectively. With respect to claims 9-12, these claims are considered to be indefinite because there appears to be no antecedent basis for (1) “said developing member”, recited on lines 18 and 19 and on lines 28 and 29, respectively, of base claim 9; (2) “said discharging member driving force receiving portion, recited on lines 22 and 23 of base claim 9; and (3) “said end cover”, recited on line 4 of claim 11, thereby rendering said claims and any claims dependent thereon indefinite. Claims 9-12 are considered to be further indefinite because it is unclear as to what is meant by the expression “of looked”, recited on line 37 of base claim 9 and it appears that the term or expression “second”, recited on lines 29 and 33, respectively, of base claim 9 should be changed to the expression--third--.

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any

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evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

7. Claims 1, 2, 3/2/1, 4-6 and 13, insofar as being adequately disclosed and insofar as being definite, are further rejected under 35 U.S.C. 103(a) as being unpatentable over Tsuda et al in view of Inomata.

All of the claimed structure is disclosed by the patent to Tsuda et al except for the concept of using the rotation moment produced by the drive receiving portion for the photosensitive member and the drive receiving portion for the discharging member, respectively, to cause the cartridge positioning portion to contact the main assembly positioning portion in a fixed manner during operation of the image forming apparatus. More specifically, with respect to claims 1, 2, 5, 6 and 13, respectively, for example, it is submitted that element 15 (Fig 1) of Tsuda et al is the detachable process cartridge which is mounted into the main assembly 27 (Fig 19) of an image forming apparatus, element 11 (Fig 1) the photosensitive member; element 18 (Fig 1) the developing member for developing latent images on the photosensitive member; element 16 (Fig 1) the developer accommodating portion having first and second developer discharging members 113 and 114 (Fig. 1) therein, as recited in claim 6, for example, for discharging the developer in the developer accommodating portion toward the developing member 18 of same; elements 15a, 15b (Fig. 19) are the cartridge positioning portions which engage with the main assembly

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positioning portions 72, 73 (Fig 19) when the process cartridge is mounted to the main assembly 27 (Fig 19); element 105a (Fig 9) the photosensitive member driving force receiving portion disposed at the leading side of the mounting direction X (Fig 9) for receiving a driving force for rotating the photosensitive member from the main assembly drive means 101, 103 (Fig 9), as recited in claims 1 and 13, for example; element 106a (Fig 9) is the discharging member driving force receiving portion at the leading side of the mounting direction X (Fig 9) for receiving a driving force for rotating the first and second discharging members 113, 114 (Fig 9) from the main assembly drive means 102, 104 (Fig 9), as recited in claims 1, 6 and 13, for example; and elements 20a and 20c (Fig 3) respectively, of the end cover 20 (Fig 3) are the first and second holes, respectively, recited in claims 3/2/1, for example, which receive the driving force transmitted from the main assembly to the photosensitive member driving force receiving portion, respectively. With respect to claim 2, for example, it is further submitted that column 17, line 49 through column 18, line 2 of Tsuda et al suggests that the outside A (Fig 10) of an outer wall of the process cartridge is used as a positioning portion which engages or contacts a portion in the main assembly 27 to thereby fix and maintain the position or attitude of the process cartridge vis-a-vis the main assembly during operation of the image forming apparatus. As to claim 5, for example, it is further submitted that the driving force received by the photosensitive member 11 (Fig 9) of Tsuda et al is transmitted to the developing member or roller 18 (Fig 9) of same by means of the meshing gears 105b, 107b (Fig 9).

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The patent to Inomata (column 14, line 53 through column 15, line 22) suggests to one having ordinary skill in the art that the rotation moment produced by the means for transmitting the driving force to the photosensitive drum 1 (Fig 1) of same causes the positioning portion 11; (Fig 19) on the process cartridge B (Fig 2) to come into contact with the rotation stopper 3e (Fig 19) on the main assembly 14 (Fig 2) so that the orientation of the process cartridge relative to the main assembly is fixed.

Therefore, to provide the outer wall of the process cartridge of Tsuda et al with a positioning portion which engages with a positioning portion on the main assembly of the image forming apparatus to fix the position of the cartridge vis-a-vis the main assembly in response to the rotation moment that is produced by the driving forces received by the respective photosensitive member driving force receiving portion and the discharging member driving force receiving portion from the main assembly, as suggested by Inomata, would be an obvious modification of the prior art to one having ordinary skill in the art at the time applicants invention was made.

8. The patent to Kojima et al and Toba et al are cited of interest to further show the obviousness or use of a removable process cartridge which has positioning portions on the cartridge which engage with positioning portions on the main assembly to fix and orient the process cartridge in the image forming apparatus.

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9. Claims 7 and 8 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, first paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.
10. Claims 9-12 and 14 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, first and second paragraphs, set forth in this Office action.
11. Any inquiry concerning this communication should be directed to Fred L Braun at telephone number (703) 308-0128.

Fred L Braun
FRED L. BRAUN
PRIMARY EXAMINER
ART UNIT ~~2852~~

F BRAUN/pj

09/10/03